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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 09/765,553 | 01/18/2001 | Wolfgang Kober | 3350-4-CIP | 1196 |
| 7590 05/25/2004 | | | EXAMINER | |
| John Thomas, PhD | | | DEPPE, BETSY LEE | |
| TensorComm, Inc. 1490 West 121St Avenue | | | ART UNIT | PAPER NUMBER |
| Suite 105 | | | 2634 | 16 |
| Westminster, CO 80234 | | | DATE MAILED: 05/25/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| • | Application No. | Applicant(s) | | | | |
|--|--|--|--|--|--|--|
| | 09/765,553 | KOBER ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Betsy L. Deppe | 2634 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute. Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| a) ☐ This action is FINAL . 2b) ☑ This action is non-final. | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 53 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-111 is/are pending in the application | ٦. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5)⊠ Claim(s) <u>1,3,6-8,11-26,28-36,38,62-70,76-85,92-103 and 109-111</u> is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>9,10,27,37 and 58-61</u> is/are rejected. | | | | | | |
| 7) Claim(s) <u>2,4,5,39-57,71-75,86-91 and 104-108</u> | is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | Г, | | | | | |
| 10)⊠ The drawing(s) filed on <u>09 July 2001</u> is/are: a)[| ☐ accepted or b)⊠ objected to b | by the Examiner. | | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correct | ion is required if the drawing(s) is obj | ected to. See 37 CFR 1.121(d). | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: | priority under 35 U.S.C. § 119(a) | -(d) or (f). | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| Copies of the certified copies of the prior | ity documents have been receive | ed in this National Stage | | | | |
| application from the International Bureau | ı (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list | of the certified copies not receive | d. | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal P | atent Application (PTO-152) | | | | |
| Paper No(s)/Mail Date <u>4,5,9,10,12</u> . | 6) Other: | (i 10 102) | | | | |
| Patent and Trademark Office | | | | | | |

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DETAILED ACTION

Drawings

- 1. The preliminary Amendment filed on July 1, 2002 indicated that a Request for Approval of Drawing Changes amending Figures 1, 4, 6, 7, 10, 11 and 12 was filed concurrently. However, the file does not include these drawing changes. The applicant should re-submit the request with the next response.
- 2. The drawings are objected to because:

the elements in Figure 1 should be labeled so that one viewing the drawings may understand the subject matter of the claimed invention without referring to the detailed description;

in Figure 2, it appears that "Filtered signals" should also be shown as an input to Projection Builder 98 in order to be consistent with Figure 3 and page 13, lines 15-19;

in Figure 7, it appears that element 182 should be "Shifts and Scales" instead of "RAKE" in order to be consistent with the paragraph beginning on page 19, line 5;

Figure 7 does not show reference numbers 187 and 188 that were added by the amendment filed July 1, 2002;

in Figure 8, "Transit" should be "Transmit" (see page 20, lines 4-7);

in Figure 8, it appears that the "Raked Signal" shown as an input to "Bank of Projection Filters 208" should be an input to "Projection Builder 204" (see page 20, lines 8-11)

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. The claims are objected to because of the following informalities:

in claim 2, line 2, "second signal segment" should be "second CDMA signal segment" (see claim 1, line 3);

in claim 4, line 4, "means" should be "means";

in claim 27, line 8, "third" should be deleted;

in claim 37, line 8, "third" should be deleted;

in claim 40, line 4, both occurrences of "an" should be "the";

in claim 48, line 4, "projection means" should be "projecting means" in order to be consistent with the dependent claims and "an output" should be "the output";

in claim 71, line lines 3-4, "scale and align in phase and time" should be "align in phase and time and then scale each of" in order to be consistent with the detailed description and lines 4 and 5;

in claim 86, line 3, "scaling and aligning in phase and time" should be "aligning in phase and time and then scaling each of" in order to be consistent with the detailed description and lines 4 and 5; and

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in claim 104, line 3, "scaling and aligning in phase and time" should be "aligning in phase and time and then scaling each of" in order to be consistent with the detailed description and lines 4 and 5.

Appropriate correction is required.

4. Claim 39 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 29. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 27, 38, and 58-61 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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8. With regard to claims 27 and 37, the aligning, scaling and summing steps are not consistent with the Figure 7 and the corresponding description in the paragraph starting on page 19, line 5. According to the claim language, the multipath signal segments are independently/separately aligned and scaled then one of the aligned signals is summed with one of the scaled signals. However, according to the detailed description, each multipath signal segment is aligned and <u>then</u> scaled to generate an aligned and scale segment and then the aligned and scaled segments are summed.

- 9. With regard to claims 58-61, the detailed description does not describe how to use at least one of the time offset, code offset and Doppler offset to determine an interference code and then building a space using the interference code. The specification mentions using these offsets but it does not include any additional details such that one skilled in the art can make and/or use the claimed invention.
- 10. Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation "the phased RAKE means" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

11. Claims 1-8, 11-26, 29-36, 40-57, and 62-111 are allowable.

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (703) 305-4960. The examiner can normally be reached on Monday, Tuesday and Thursday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (703) 305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Betsy L. Deppe Primary Examiner Art Unit 2634